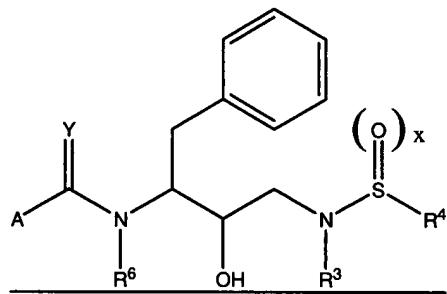
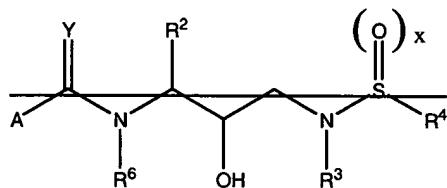


This Listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (amended) A compound represented by the formula:



or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein

~~R<sup>2</sup> is an alkyl, aryl, cycloalkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo, nitro, cyano, CF<sub>3</sub>, OR<sup>9</sup>, and SR<sup>9</sup>, wherein R<sup>9</sup> is a radical selected from the group consisting of hydrogen and alkyl;~~

~~R<sup>3</sup> is a hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radicals, wherein said substituents are selected~~

from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

$R^4$  is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

$R^6$  is a hydrogen or alkyl radical;

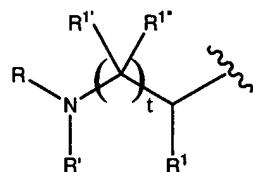
$x$  is 1 or 2;

$t$  is 0 or 1; and

$Y$  is O or S; and

$A$  is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, cycloalkylalkoxy, cycloalkylalkyl, aralkyl, aryl, aryloxy, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heterocycloalkylalkoxy, heteroaralkyl, heteroaralkoxy, heteroaryloxy, heteroaryl,

alkenyl, aryloxyalkyl, heteroaryloxyalkyl, hydroxyalkyl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkyalkyl radicals; or where said amino radical is disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl or heteroaryl radical; or is represented by the formula



wherein R is a hydrogen, alkoxy carbonyl, aralkoxy carbonyl, alkyl carbonyl, cycloalkyl carbonyl, cycloalkylalkoxy carbonyl, cycloalkylalkanoyl, carboxy alkanoyl, alkanoyl, aralkanoyl, aroyl, aryloxy carbonyl, aryloxy carbonylalkyl, aryloxy alkanoyl, heterocyclyl carbonyl, heterocyclyloxy carbonyl, heterocyclylalkanoyl, heterocyclylalkoxy carbonyl, heteroaralkanoyl, heteroaralkoxy carbonyl, heteroaryloxy carbonyl, heteroaroyl, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, aryloxyalkyl, heteroaryloxyalkyl, hydroxyalkyl, aminocarbonyl, amino alkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted amino alkanoyl radical, wherein the substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkyalkyl radicals; or wherein said aminocarbonyl or amino alkanoyl radicals are disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl or heteroaryl radical;

R' is a radical as defined for R<sup>3</sup> or R"SO<sub>2</sub>-, wherein R" is a radical as defined for R<sup>3</sup>; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R<sup>1</sup> is a hydrogen, -CO<sub>2</sub>CH<sub>3</sub>, -CH<sub>2</sub>CO<sub>2</sub>CH<sub>3</sub>, -CO<sub>2</sub>H, -CH<sub>2</sub>CO<sub>2</sub>H, -CH<sub>2</sub>CH<sub>2</sub>CONH<sub>2</sub>, -CH<sub>2</sub>CONH<sub>2</sub>, -CONH<sub>2</sub>, -CH<sub>2</sub>C(O)NHCH<sub>3</sub>, -CH<sub>2</sub>C(O)N(CH<sub>3</sub>)<sub>2</sub>, -CONHCH<sub>3</sub>, -CONH(CH<sub>3</sub>)<sub>2</sub>, -CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>S[O]CH<sub>3</sub>, -CH<sub>2</sub>S[O]<sub>2</sub>CH<sub>3</sub>, -C(CH<sub>3</sub>)<sub>2</sub>(SCH<sub>3</sub>), -C(CH<sub>3</sub>)<sub>2</sub>(S[O]CH<sub>3</sub>), -C(CH<sub>3</sub>)<sub>2</sub>(S[O]<sub>2</sub>CH<sub>3</sub>), alkyl, hydroxyalkyl, cyanoalkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, alkylthioalkyl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical; and

each of R<sup>1'</sup> and R<sup>1''</sup> are independently a radical as defined for R<sup>1</sup>; or one of R<sup>1'</sup> and R<sup>1''</sup> together with R<sup>1</sup> and the carbon atoms to which R<sup>1</sup>, R<sup>1'</sup> and R<sup>1''</sup> are attached, form a cycloalkyl radical.

2. (amended) The compound of claim 1 or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein

~~R<sup>2</sup> is an alkyl, aryl, cycloalkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo and OR<sup>9</sup>, wherein R<sup>9</sup> is a radical selected from the group consisting of hydrogen and alkyl;~~

R<sup>3</sup> is a hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radicals, wherein said substituents are selected from the group consisting of alkyl, aralkyl, cycloalkyl and cycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

R<sup>4</sup> is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl or heteroaralkyl radical;

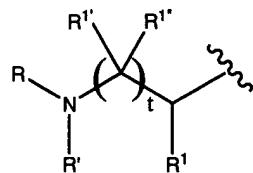
R<sup>6</sup> is a hydrogen or alkyl radical;

x is 1 or 2;

t is 0 or 1; and

Y is O or S; and

A is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, cycloalkylalkoxy, cycloalkylalkyl, aralkyl, aryl, aryloxy, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heterocycloalkylalkoxy, heteroaralkyl, heteroaralkoxy, heteroaryloxy, heteroaryl, hydroxyalkyl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkyl radicals; or where said amino radical is disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl radical; or is represented by the formula



wherein R is a hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, carboxyalkanoyl, alkanoyl, aralkanoyl, aroyl, heterocyclcarbonyl, heterocyclloxy carbonyl, heterocyclalkanoyl, heterocyclalkoxycarbonyl, heteroaralkanoyl, heteroaralkoxycarbonyl, heteroaryloxy-carbonyl, heteroaroyl, alkyl, cycloalkyl, aralkyl, hydroxyalkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are selected from the group consisting of alkyl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkyl radicals; or wherein said aminocarbonyl or aminoalkanoyl radicals are disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl or heteroaryl radical;

R' is a hydrogen, alkyl or aralkyl radical or R"SO<sub>2</sub>-, wherein R" is a radical as defined for R<sup>3</sup>; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R<sup>1</sup> is a hydrogen, -CO<sub>2</sub>CH<sub>3</sub>, -CH<sub>2</sub>CO<sub>2</sub>CH<sub>3</sub>, -CO<sub>2</sub>H, -CH<sub>2</sub>CO<sub>2</sub>H, -CH<sub>2</sub>CH<sub>2</sub>CONH<sub>2</sub>, -CH<sub>2</sub>CONH<sub>2</sub>, -CONH<sub>2</sub>, -CH<sub>2</sub>C(O)NHCH<sub>3</sub>, -CH<sub>2</sub>C(O)N(CH<sub>3</sub>)<sub>2</sub>, -CONHCH<sub>3</sub>, -CONH(CH<sub>3</sub>)<sub>2</sub>, -CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>S[O]CH<sub>3</sub>, -CH<sub>2</sub>S[O]<sub>2</sub>CH<sub>3</sub>, -C(CH<sub>3</sub>)<sub>2</sub>(SCH<sub>3</sub>), -C(CH<sub>3</sub>)<sub>2</sub>(S[O]CH<sub>3</sub>), -C(CH<sub>3</sub>)<sub>2</sub>(S[O]<sub>2</sub>CH<sub>3</sub>), alkyl, hydroxyalkyl, cyanoalkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, alkylthioalkyl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical; and

each of R<sup>1</sup> and R<sup>1</sup>" are independently a radical as defined for R<sup>1</sup>; or one of R<sup>1</sup> and R<sup>1</sup>" together with R<sup>1</sup> and the carbon atoms to which R<sup>1</sup>, R<sup>1</sup>' and R<sup>1</sup>" are attached, form a cycloalkyl radical.

3. (amended) The compound of claim 2 or a pharmaceutically acceptable salt or ester thereof, wherein

~~R<sup>2</sup> is an alkyl, aryl, cycloalkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo and OR<sup>9</sup>, wherein R<sup>9</sup> is a radical selected from the group consisting of hydrogen and alkyl;~~

$R^3$  is a hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or dialkyl substituted aminoalkyl radical;

$R^4$  is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl or heteroaralkyl radical;

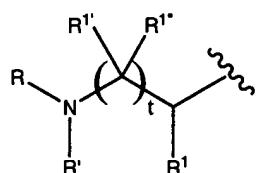
$R^6$  is a hydrogen or alkyl radical;

$x$  is 1 or 2;

$t$  is 0 or 1; and

$Y$  is O or S; and

$A$  is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, aryl, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heteroaralkoxy, heteroaryl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals; or is represented by the formula



wherein R is a hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, carboxyalkanoyl, alkanoyl, aroyl, heteroaroyl, alkyl, aralkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals;

R' is a hydrogen, alkyl or aralkyl radical or R"SO<sub>2</sub>-, wherein R" is a radical as defined for R<sup>3</sup>; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R<sup>1</sup> is a hydrogen, -CO<sub>2</sub>CH<sub>3</sub>, -CH<sub>2</sub>CO<sub>2</sub>CH<sub>3</sub>, -CO<sub>2</sub>H, -CH<sub>2</sub>CO<sub>2</sub>H, -CH<sub>2</sub>CH<sub>2</sub>CONH<sub>2</sub>, -CH<sub>2</sub>CONH<sub>2</sub>, -CONH<sub>2</sub>, -CH<sub>2</sub>C(O)NHCH<sub>3</sub>, -CH<sub>2</sub>C(O)N(CH<sub>3</sub>)<sub>2</sub>, -CONHCH<sub>3</sub>, -CONH(CH<sub>3</sub>)<sub>2</sub>, -CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>S[O]CH<sub>3</sub>, -CH<sub>2</sub>S[O]<sub>2</sub>CH<sub>3</sub>, -C(CH<sub>3</sub>)<sub>2</sub>(SCH<sub>3</sub>), -C(CH<sub>3</sub>)<sub>2</sub>(S[O]CH<sub>3</sub>), -C(CH<sub>3</sub>)<sub>2</sub>(S[O]<sub>2</sub>CH<sub>3</sub>), alkyl, hydroxyalkyl, cyanoalkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, alkylthioalkyl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl and aralkyl radicals; and

R<sup>1'</sup> is a hydrogen, alkyl or aralkyl; and R<sup>1''</sup> is a hydrogen, alkyl, -CO<sub>2</sub>CH<sub>3</sub> or -CONH<sub>2</sub>; or one of R<sup>1'</sup> and R<sup>1''</sup> together with R<sup>1</sup> and the carbon atoms to which R<sup>1</sup>, R<sup>1'</sup> and R<sup>1''</sup> are attached, form a cycloalkyl radical.

4. (amended) The compound of claim 3 or a pharmaceutically acceptable salt or ester thereof, wherein

~~R<sup>2</sup> is an alkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo and OR<sup>9</sup>, wherein R<sup>9</sup> is a radical selected from the group consisting of hydrogen and alkyl;~~

R<sup>3</sup> is a hydrogen, alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or dialkyl substituted aminoalkyl radical;

R<sup>4</sup> is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl or heteroaralkyl radical;

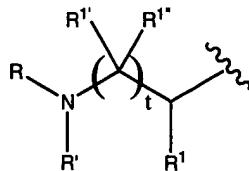
R<sup>6</sup> is a hydrogen or alkyl radical;

x is 1 or 2;

t is 0 or 1; and

Y is O or S; and

A is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, aryl, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heteroaralkoxy, heteroaryl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals; or is represented by the formula



wherein R is a hydrogen, alkoxy carbonyl, aralkoxy carbonyl, alkyl carbonyl, carboxy alkanoyl, alkanoyl, aroyl, hetero aroyl, alkyl, aralkyl, aminocarbonyl, amino alkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted amino alkanoyl radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals;

R' is a hydrogen, alkyl or aralkyl radical or R"SO<sub>2</sub>-, wherein R" is a radical as defined for R<sup>3</sup>; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R<sup>1</sup> is a hydrogen, -CO<sub>2</sub>H, -CH<sub>2</sub>CO<sub>2</sub>H, -CH<sub>2</sub>CH<sub>2</sub>CONH<sub>2</sub>, -CH<sub>2</sub>CONH<sub>2</sub>, -CONH<sub>2</sub>, -CH<sub>2</sub>C(O)NHCH<sub>3</sub>, -CH<sub>2</sub>C(O)N(CH<sub>3</sub>)<sub>2</sub>, -CONHCH<sub>3</sub>, -CONH(CH<sub>3</sub>)<sub>2</sub>, -CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, alkyl, hydroxy alkyl, cyano alkyl, alkynyl, cyclo alkyl alkyl, alkyl thio alkyl, aralkyl or hetero aralkyl radical; and

R<sup>1'</sup> is a hydrogen, alkyl or aralkyl; and R<sup>1''</sup> is a hydrogen, alkyl, -CO<sub>2</sub>CH<sub>3</sub> or -CONH<sub>2</sub>; or one of R<sup>1</sup> and R<sup>1''</sup> together with R<sup>1</sup> and the carbon atoms to which R<sup>1</sup>, R<sup>1'</sup> and R<sup>1''</sup> are attached, form a cyclo alkyl radical;

with the proviso that alkyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical containing from one to eight carbon atoms; alkynyl, alone or in combination, is a straight-chain or branched-chain

hydrocarbon radical having at least one double bond and containing from two to eight carbon atoms; alkynyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical having at least one triple bond and containing from two to ten carbon atoms; and cycloalkyl, alone or in combination, is a hydrocarbon ring containing from three to eight carbon atoms.

5. (amended) The compound of claim 4 or a pharmaceutically acceptable salt or ester thereof, wherein

$R^2$  is an alkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo and  $-OR^9$ , wherein  $R^9$  is a radical selected from the group consisting of hydrogen and alkyl;

$R^3$  is a hydrogen, alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or dialkyl substituted aminoalkyl radical;

$R^4$  is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl or heteroaralkyl radical;

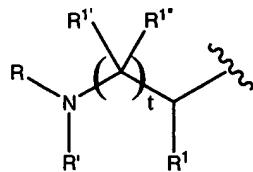
$R^6$  is a hydrogen or alkyl radical;

$x$  is 1 or 2;

$t$  is 0 or 1; and

Y is O or S; and

A is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, aryl, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heteroaralkoxy, heteroaryl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals; or is represented by the formula



wherein R is a hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, carboxyalkanoyl, alkanoyl, aroyl, heteroaroyl, alkyl, aralkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals;

R' is a hydrogen, alkyl or aralkyl radical or R"SO<sub>2</sub>-, wherein R" is a radical as defined for R<sup>3</sup>; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R<sup>1</sup> is a hydrogen, -CO<sub>2</sub>H, -CH<sub>2</sub>CO<sub>2</sub>H, -CH<sub>2</sub>CH<sub>2</sub>CONH<sub>2</sub>, -CH<sub>2</sub>CONH<sub>2</sub>, -CONH<sub>2</sub>, -CH<sub>2</sub>C(O)NHCH<sub>3</sub>, -CH<sub>2</sub>C(O)N(CH<sub>3</sub>)<sub>2</sub>, -CONHCH<sub>3</sub>, -CONH(CH<sub>3</sub>)<sub>2</sub>, -CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, alkyl, hydroxyalkyl, cyanoalkyl, alkynyl, cycloalkylalkyl, alkylthioalkyl, aralkyl or heteroaralkyl radical; and

$R^{1'}$  is a hydrogen, alkyl or aralkyl; and  $R^{1''}$  is a hydrogen, alkyl,  $-CO_2CH_3$  or  $-CONH_2$ ; or one of  $R^{1'}$  and  $R^{1''}$  together with  $R^1$  and the carbon atoms to which  $R^1$ ,  $R^{1'}$  and  $R^{1''}$  are attached, form a cycloalkyl radical;

with the proviso that alkyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical containing from one to five carbon atoms; alkenyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical having at least one double bond and containing from two to five carbon atoms; alkynyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical having at least one triple bond and containing from two to five carbon atoms; and cycloalkyl, alone or in combination, is a hydrocarbon ring containing from three to eight carbon atoms; ~~and with the proviso that when  $R^2$  is cycloalkylalkyl and  $t$  is 0,  $R'$  is a group other than alkoxy carbonyl.~~

6. (amended) The compound of claim 5 or a pharmaceutically acceptable salt or ester thereof, wherein

~~$R^2$  is butyl, cyclohexylmethyl, benzyl, 4-fluorobenzyl or naphthylmethyl;~~

$R^3$  is methyl, ethyl, propyl, butyl, pentyl, hexyl, iso-butyl, iso-amyl, 3-methoxypropyl, 3-methylthiopropyl, 4-methylthiobutyl, 4-methylsulfonylbutyl, 2-dimethylaminoethyl, 2-(1-morpholino)ethyl, 4-hydroxybutyl, allyl, propargyl, cyclohexylmethyl, cyclopropylmethyl, phenyl, benzyl, 4-fluorobenzyl, 4-methoxybenzyl, 1-phenylethyl, 2-phenylethyl, naphthylmethyl, 3-pyridylmethyl or 4-pyridylmethyl;

$R^4$  is methyl, ethyl, propyl, butyl, ethenyl, chloromethyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, chlorophenyl, fluorophenyl, hydroxyphenyl, methylphenyl, methoxyphenyl, ethoxyphenyl, methylthiophenyl, methylsulfoxyphenyl, methylsulfonylphenyl, acetamidophenyl, methoxycarbonylphenyl, dimethylaminophenyl, nitrophenyl, trifluoromethylphenyl, benzyl, 2-phenylethenyl or thienyl;

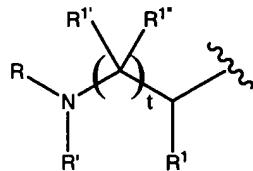
$R^6$  is hydrogen;

$x$  is 2;

$t$  is or 1; and

$Y$  is O; and

$A$  is methyl, cyclohexyl, cyclopentyl, cycloheptyl, 1,2,3,4-tetrahydronaphthyl, naphthyl, quinolinyl, indolyl, pyridyl, methylpyridyl, furanyl, thiophenyl, oxazolyl, thiazolyl, phenyl, methylphenyl, ethylphenyl, dimethylphenyl, iso-propylphenyl, chlorophenyl, hydroxyphenyl, methoxyphenyl, methylsulfonylphenyl, methylsulfonylmethylphenyl, carboxyphenyl, aminocarbonylphenyl, methylhydroxyphenyl, methylnitrophenyl, methylaminophenyl, methyl-N,N-dimethylaminophenyl, t-butoxy, benzyloxy, pyridylmethoxy, 3-propenoxy, hydroxypyridylmethoxy, aminopyridylmethoxy, pyrimidinylmethoxy, N-oxo-pyrimidinylmethoxy, thiazolylmethoxy, tetrahydrothiophenoxy, 1,1-dioxotetrahydrothiophenoxy, tetrahydrofuranoxy, methylamino, benzylamino or isopropylamino; or is represented by the formula



wherein R is hydrogen, acetyl, phenoxyacetyl, methoxyacetyl, naphthaloxycetyl, succinoyl, 2-methylpropionoyl, 2-hydroxypropionoyl, t-butoxycarbonyl, benzyloxycarbonyl, methoxybenzyloxycarbonyl, aminocarbonyl, quinolinylcarbonyl, N-methylglycyl or N,N-dimethylglycyl;

R' is hydrogen, benzyl or methyl; or R and R' together with the nitrogen to which they are attached form pyrrolyl;

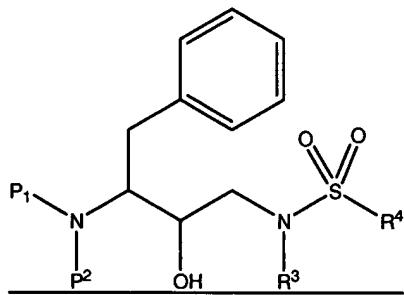
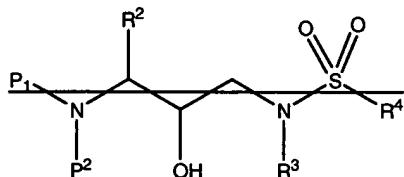
R<sup>1</sup> is hydrogen, -CO<sub>2</sub>H, -CH<sub>2</sub>CO<sub>2</sub>H, -CH<sub>2</sub>CH<sub>2</sub>CONH<sub>2</sub>, -CH<sub>2</sub>CONH<sub>2</sub>, -CONH<sub>2</sub>, -CH<sub>2</sub>C(O)NHCH<sub>3</sub>, -CH<sub>2</sub>C(O)N(CH<sub>3</sub>)<sub>2</sub>, -CONHCH<sub>3</sub>, -CONH(CH<sub>3</sub>)<sub>2</sub>, -CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, -CH<sub>2</sub>CH<sub>2</sub>SO<sub>2</sub>NH<sub>2</sub>, methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, 3-methylbutyl, cyclohexylmethyl, benzyl, hydroxybenzyl, imidazoyl, imidazoylmethyl, cyanomethyl, methylthiomethyl, propargyl or hydroxyethyl; and

R<sup>1'</sup> is hydrogen, methyl, ethyl, propyl, isopropyl, butyl, isobutyl, benzyl, phenylethyl, phenylpropyl, phenylbutyl or 4,4-diphenylbutyl; and R<sup>1''</sup> is hydrogen, methyl, -CO<sub>2</sub>CH<sub>3</sub> or -CONH<sub>2</sub>; or one of R<sup>1</sup> and R<sup>1''</sup> together with R<sup>1</sup> and the carbon atoms to which R<sup>1</sup>, R<sup>1'</sup> and R<sup>1''</sup> are attached, form cyclobutyl, cyclopentyl or cyclohexyl;

~~with the proviso that when R<sup>2</sup> is cyclohexylmethyl and t is 0, R' is a group other than t-butoxycarbonyl.~~

7. (canceled)

8. (amended) A compound represented by the formula:



or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein

each of P<sup>1</sup> and P<sup>2</sup> independently represent hydrogen, alkoxy carbonyl, aralkoxy carbonyl, alkyl carbonyl, cycloalkyl carbonyl, cycloalkylalkoxy carbonyl, cycloalkylalkanoyl, alkanoyl, aralkanoyl, aroyl, aryloxycarbonyl, aryloxycarbonylalkyl, aryloxyalkanoyl, heterocycl carbonyl, heterocyclyloxy carbonyl, heterocyclalkanoyl, heterocyclalkoxy carbonyl, heteroaralkanoyl, heteroaralkoxy carbonyl, heteroaryloxy carbonyl, heteroaroyl, alkyl, alkenyl, cycloalkyl, aryl, aralkyl, aryloxyalkyl, heteroaryloxyalkyl, hydroxyalkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are

selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkanoyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl or heteroaryl radical;

~~R<sup>2</sup> is an alkyl, aryl, cycloalkyl, cycloalkylalkyl or aralkyl radical, which radicals are optionally substituted with a group selected from alkyl and halogen radicals, nitro, cyano, CF<sub>3</sub>, OR<sup>9</sup>, SR<sup>9</sup>, wherein R<sup>9</sup> is a hydrogen or alkyl radical;~~

R<sup>3</sup> is a hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where the aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical; and

R<sup>4</sup> is a radical as defined by R<sup>3</sup> except for hydrogen.

9. (amended) The compound of claim 8, wherein each of P<sup>1</sup> and P<sup>2</sup> independently represent a hydrogen, alkoxy carbonyl, aralkyloxycarbonyl, heteroaralkyloxycarbonyl, aroyl, heteroaroyl, alkanoyl or cycloalkanoyl radical;

~~R<sup>2</sup> is a cycloalkylalkyl, aralkyl or alkyl radical;~~

$R^3$  is an alkyl, cycloalkyl or cycloalkylalkyl radical; and

$R^4$  is an aryl, alkyl, heteroaryl or aryl radical.

10. (amended) The compound of claim 9, wherein  $P^1$  and  $P^2$  independently represent hydrogen, 3-pyridylmethyloxycarbonyl, 3-pyridylmethyloxycarbonyl N-oxide, 4-pyridylmethyloxycarbonyl, 4-pyridylmethyloxycarbonyl N-oxide, 5-pyrimidylmethyloxycarbonyl, tert-butyloxycarbonyl, allyloxycarbonyl, 2-propyloxycarbonyl, benzyloxycarbonyl, cycloheptylcarbonyl, cyclohexylcarbonyl, cyclopentylcarbonyl, benzoyl, 4-pyridylcarbonyl, 2-methylbenzoyl, 3-methylbenzoyl, 4-methylbenzoyl, 2-chlorobenzoyl, 2-ethylbenzoyl, 2,6-dimethylbenzoyl, 2,3-dimethylbenzoyl, 2,4-dimethylbenzoyl or 2,5-dimethylbenzoyl;

$R^2$  is benzyl, cyclohexylmethyl, 2-naphthylmethyl, para-fluorobenzyl, para-methoxybenzyl, isobutyl or n-butyl;

$R^3$  is isobutyl, isoamyl, cyclohexyl, cyclohexylmethyl, n-butyl or n-propyl; and

$R^4$  is phenyl, para-methoxyphenyl, para-cyanophenyl, para-chlorophenyl, para-hydroxyphenyl, para-nitrophenyl, para-fluorophenyl, 2-naphthyl, 3-pyridyl, 3-pyridyl N-oxide, 4-pyridyl or 4-pyridyl N-oxide;

~~with the proviso that when  $R^2$  is cyclohexylmethyl, each of  $P^1$  and  $P^2$  independently represent a group other than tert-butyloxycarbonyl.~~

11. (canceled)

12. (canceled)

13. (original) A pharmaceutical composition comprising a compound of Claim 1 and a pharmaceutically acceptable carrier.

14. (original) A pharmaceutical composition comprising a compound of Claim 8 and a pharmaceutically acceptable carrier.

15. (original) Method of inhibiting a retroviral protease comprising administering an effective amount of a compound of Claim 1.

16. (original) Method of inhibiting a retroviral protease comprising administering an effective amount of a compound of Claim 8.

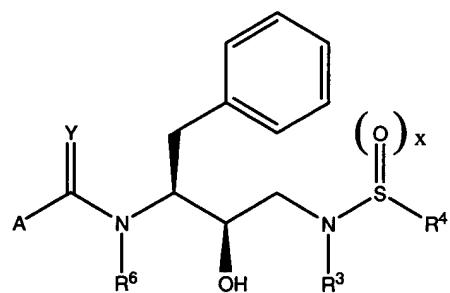
17. (original) Method of treating a retroviral infection comprising administering an effective amount of a composition of Claim 13.

18. (original) Method of treating a retroviral infection comprising administering an effective amount of a composition of Claim 14.

19. (original) Method of preventing replication of a retrovirus comprising administering an effective amount of a compound of Claim 1.

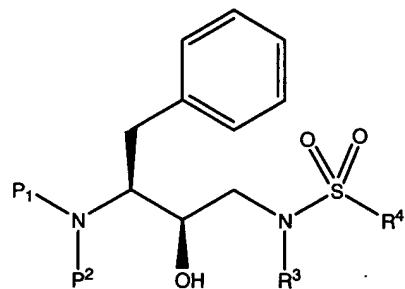
20. (original) Method of preventing replication of a retrovirus comprising administering an effective amount of a compound of Claim 8.

21. (new) The compound of claim 1, represented by the formula:



wherein R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup>, x, Y, and A are as defined in claim 1.

22. (new) The compound of claim 8, represented by the formula:



wherein P<sup>1</sup>, P<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup> are as defined in claim 8.

23. (new) A pharmaceutical composition comprising a compound of Claim 21 and a pharmaceutically acceptable carrier.